

Patent claims:

1. An implant in the urinary bladder characterized in that an active agent with the ability of killing or making germs ineffective is brought into the urinary bladder as an implant using a special active agent carrier.

2. An implant as set forth in claim 1 characterized in that the active agent consists of particles in a colloidal form, in particular in a relative uniform nano-size, for example nanosilver or another respective substance.

3. An implant as set forth in claim 2 characterized in that the active agent silver in a nano-porous state is introduced into the active agent carrier in a concentration of, for example, 0.1 - 2 percent in weight.

4. An implant as set forth in claim 2 characterized in that the active agent silver in a nano-dispersive state is introduced into the active agent carrier in a concentration of, for example, 0.01 - 0.1 percent in weight.

5. An implant as set forth in one or both of the claims 3 and 4 characterized in that the active agent silver is introduced into the active agent carrier in a mixed manner in both the nanoporous and the nanodispersive state in a suitable ratio.

6. An implant as set forth in claim 1 characterized in that the active agent, e.g., an antiseptic, antibiotic, or another suitable biocide is chemically bound to the active agent carrier as a matrix.

7. An implant as set forth in claims 1 to 6 characterized in that the active agent carrier is, for example, a polymer that is equipped, for example, with shape memory properties or that obtains in the bladder space a shape suitable for the purpose through absorbing liquids, through temperature changes or through another stimulus.

8. An implant as set forth in claim 7 characterized in that the active agent carrier dissolves, disintegrates or is changed into a different shape by changing the pH-value and/or in the presence of enzymes or another stimulus, such that it can be flushed out through the urethra together with the active agent.

9. An implant as set forth in claim 8

characterized in that the active agent carrier itself is biodegradable, whereby the duration of the disintegration is specified in the properties of the active agent carrier and its structure.

10. An implant as set forth in claim 9

characterized in that the implant with its elongated shape, e.g., 30 cm long and 4 mm in diameter, is pushed into the bladder space directly or with the use of a catheter or another suitable device through the urethra or suprapubically.

11. An implant as set forth in claim 10

characterized in that the elongated active agent carrier is comprised of many individual thin strings.

12. An implant as set forth in claim 11

characterized in that based on the shape memory properties of the active agent carrier material and the changed temperature a ball or a wad, for example, is formed in the bladder space that can no longer be flushed out through the bladder outlet.

13. An implant as set forth in one or more of claims 1 to 10 characterized in that the elongated active agent carrier is made of a foamed material in one piece or in individual shorter pieces, whereby during manufacturing the foam structure is pressed together in a compression process, whereby the volume or the cross-section is relatively small in this state.

14. An implant as set forth in claim 13 characterized in that the compressed active agent carrier foam returns to its previous foam structure in the bladder space due to its shape memory properties and the increased surrounding temperature, that is, it assumes a relatively large volume.

15. An implant as set forth in claim 14 characterized in that the implant body assumes a shape in the bladder space due to its shape memory properties, which on the one hand precludes a flushing out of the implant and on the other hand keeps the bladder outlet permeable to urine.

16. An implant as set forth in one or more of claims 13 to 15 characterized in that the compressed implant body is encased in a water-soluble mechanically solid sheath that holds it firmly in its compressed shape.

17. An implant as set forth in claim 16 characterized in that the implant body assumes its shape according to claims 14 and 15 through the dissolution of the mechanically solid sheath and through the elasticity and/or through a swelling process in the bladder space.

18. An implant as set forth in one or more of claims 1 to 17 characterized in that an end piece is attached to the implant body, which is equipped with a separable connection to the active agent carrier and that can be pulled out after insertion of the implant.

19. An implant as set forth in one or more of claims 1 to 17 characterized in that the bladder implant is connected to a permanent catheter.